

Version 2.0

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#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	K00787 TM AROMATICS ARMBKIT14-4C MDW BRZ
Material number	:	0000000001047355
Manufacturer or supplier's o	deta	ails
Company	:	Zep Inc.
Address	:	1310 Seaboard Industrial Blvd., NW Atlanta, GA 30318
Telephone	:	404-352-1680

Emergency telephone numbers				
For SDS Information	: Compliance Services 1-877-428-9937			
For a Medical Emergency	: 877-541-2016 Toll Free - All Calls Recorded			
For a Transportation	: CHEMTREC: 800-424-9300 - All Calls Recorded.			
Emergency	In the District of Columbia 202-483-7616			

#### **SECTION 2. HAZARDS IDENTIFICATION**

#### **Emergency Overview**

Appearance	Aerosol containing a liquefied gas
Colour	colourless, light yellow
Odour	characteristic

#### **GHS Classification**

Flammable aerosols Gases under pressure Eye irritation Specific target organ toxicity - single exposure	:	Category 2 Liquefied gas Category 2A Category 3 (Central nervous system)
GHS Label element		
Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	H223 Flammable aerosol. H280 Contains gas under pressure; may explode if heated. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements	:	<b>Prevention:</b> P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.



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	use. P261 Avoid breathing dust/ fume/ P264 Wash skin thoroughly after h P271 Use only outdoors or in a we P280 Wear eye protection/ face pr <b>Response:</b> P304 + P340 + P312 IF INHALED and keep at rest in a position comf POISON CENTER or doctor/ phys P305 + P351 + P338 IF IN EYES: for several minutes. Remove conta easy to do. Continue rinsing. P337 + P313 If eye irritation persis attention. <b>Storage:</b> P403 + P233 Store in a well-ventil tightly closed. P405 Store locked up. P410 + P412 Protect from sunlight temperatures exceeding 50 °C/ 12 <b>Disposal:</b> Dispose of contents/container in a regulation.	handling. ell-ventilated area. rotection. : Remove victim to fresh air fortable for breathing. Call a sician if you feel unwell. Rinse cautiously with water act lenses, if present and sts: Get medical advice/ ated place. Keep container t. Do not expose to 22 °F.
Potential Health Effects		
Carcinogenicity:		
IARC	No component of this product present equal to 0.1% is identified as probable human carcinogen by IARC.	e, possible or confirmed
ACGIH	No component of this product present equal to 0.1% is identified as a carcino carcinogen by ACGIH.	
OSHA	No component of this product present equal to 0.1% is identified as a carcino carcinogen by OSHA.	
NTP	No component of this product present equal to 0.1% is identified as a known by NTP.	

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical Name	CAS-No.	Concentration [%]
1,1-difluoroethane	75-37-6	>= 50 - < 70
propan-2-ol	67-63-0	>= 20 - < 30
alkanes, C12-14-iso-	68551-19-9	>= 5 - < 10

#### **SECTION 4. FIRST AID MEASURES**

General advice

: Move out of dangerous area.



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	Show this safety data sheet to the Do not leave the victim unattended	
If inhaled	: Consult a physician after significat If unconscious place in recovery p advice.	
In case of skin contact	: Take off contaminated clothing an Get medical attention if irritation de Wash contaminated clothing befor Wash off immediately with plenty of minutes.	evelops and persists. re re-use.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a s Rinse immediately with plenty of w	specialist.
If swallowed	<ul> <li>Keep respiratory tract clear. Never give anything by mouth to a If symptoms persist, call a physicia DO NOT induce vomiting unless d physician or poison control center. Take victim immediately to hospita</li> </ul>	an. lirected to do so by a

ZepInc

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical Water spray jet
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide Smoke Fluorine compounds
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.



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#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up or vacuum up spillage and collect in suitable container for disposal.

#### SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	<ul> <li>Avoid exposure - obtain special instructions before use.</li> <li>Avoid contact with skin and eyes.</li> <li>For personal protection see section 8.</li> <li>Smoking, eating and drinking should be prohibited in the application area.</li> <li>Do not breathe vapours or spray mist.</li> <li>Take precautionary measures against static discharges.</li> <li>Provide sufficient air exchange and/or exhaust in work rooms.</li> <li>Dispose of rinse water in accordance with local and national regulations.</li> <li>Always replace cap after use.</li> </ul>
Conditions for safe storage	:	BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. No smoking. Observe label precautions. Keep in a dry, cool and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	:	Keep away from oxidizing agents and strongly acid or alkaline materials.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

	Components	CAS-No.	Value type	Control	Basis
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		(Form of exposure)	parameters / Permissible concentration	
1,1-difluoroethane	75-37-6	TWA	1,000 ppm	US WEEL
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA P0
		STEL	500 ppm 1,225 mg/m3	OSHA P0

#### **Biological occupational exposure limits**

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workwee k	40 mg/l	ACGIH BEI

#### Personal protective equipment

Respiratory protection	:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Hand protection Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Ensure that eyewash stations and safety showers are close to the workstation location. Tightly fitting safety goggles
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a liquefied gas
Colour	: colourless, light yellow

### SAFETY DATA SHEET



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	Odour	:	characteristic	
	Odour Threshold	:	No data available	
	рН	:	Not applicable	
	Melting point/freezing point	:	No data available	
	Boiling point	:	No data available	
	Flash point	:	Not applicable	
	Evaporation rate	:	No data available	
	Upper explosion limit	:	No data available	
	Lower explosion limit	:	No data available	
	Vapour pressure	:	No data available	
	Relative vapour density	:	No data available	
	Density	:	No data available	
	Solubility(ies)			
	Water solubility	:	negligible	
	Partition coefficient: n- octanol/water	:	No data available	
	Auto-ignition temperature	:	not determined	
	Thermal decomposition	:	No data available	
	Viscosity			
	Viscosity, kinematic	:	No data available	

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
reactions	Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Acids Oxidizing agents
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

#### SECTION 11. TOXICOLOGICAL INFORMATION



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Acute toxicity		
Product:		
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 m Method: Calculation method	g/kg

#### Components:

1,1-difluoroethane:	
Acute inhalation toxicity	: LC50 Mouse: 977,000 mg/l Exposure time: 2 h
propan-2-ol:	
propan-2-ol: Acute oral toxicity	: LD50 Oral Rat: 4,396 mg/kg Method: Calculation method

#### Skin corrosion/irritation

#### Product:

Remarks: May cause skin irritation in susceptible persons.

#### Serious eye damage/eye irritation

#### Product:

Remarks: Irritating to eyes.

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### **Reproductive toxicity**

No data available

1,1-difluoroethane: propan-2-ol: alkanes, C12-14-iso-:

#### STOT - single exposure

No data available

#### STOT - repeated exposure

No data available

#### Aspiration toxicity

No data available

#### **Further information**

Product:

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Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

#### **SECTION 12. ECOLOGICAL INFORMATION**

#### Ecotoxicity

No data available	
Persistence and degradability	
No data available <b>Bioaccumulative potential</b>	
Product:	
Partition coefficient: n- octanol/water	: Remarks: No data available
Mobility in soil	
No data available	
Other adverse effects	
No data available <u>Product:</u>	
Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information	: No data available

#### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	<ul> <li>Dispose of in accordance with local regulations.</li> <li>Do not contaminate ponds, waterways or ditches with chemical or used container.</li> <li>The product should not be allowed to enter drains, water courses or the soil.</li> </ul>
Contaminated packaging	<ul> <li>Do not burn, or use a cutting torch on, the empty drum.</li> <li>Dispose of as unused product.</li> <li>Do not re-use empty containers.</li> <li>Empty remaining contents.</li> </ul>



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#### **SECTION 14. TRANSPORT INFORMATION**

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air): UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada): UN1950, AEROSOLS, 2.1, - Limited quantity

#### SECTION 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know Act

#### **CERCLA** Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
diethyl phthalate	84-66-2	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazard	s : Fire Hazard Sudden Release of Pressure Hazard Acute Health Hazard	
SARA 302	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.	
SARA 313	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.	
California Prop 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	
The components of this product are reported in the following inventories:		
TSCA	On TSCA Inventory	

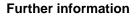


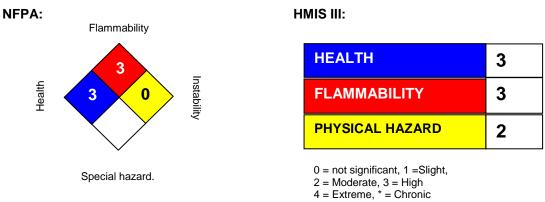
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DSL	This product contains one or several compo	nents that are not on the
	Canadian DSL nor NDSL.	
AICS	Not in compliance with the inventory	
NZIoC	Not in compliance with the inventory	
PICCS	Not in compliance with the inventory	
IECSC	Not in compliance with the inventory	

#### Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

#### **SECTION 16. OTHER INFORMATION**





**OSHA GHS Label Information:** 

Hazard pictograms	
Signal word	: Warning:
Hazard statements	: Flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary statements	
	<b>Prevention:</b> Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/ face protection.
	<b>Response:</b> IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.
	Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. <b>Disposal:</b> Dispose of contents/container in accordance with local regulation.

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